

Durgin Sand & Gravel, Inc.
Cumberland County
Gray, Maine
A-833-71-A-N

Departmental
Findings of Fact and Order
Air Emission License

After review of the air emission license application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Durgin Sand & Gravel, Inc. (DSG) located in Gray, Maine has applied for an Air emission License, permitting the operation of a crushed stone and gravel facility.

B. Emission Equipment

Rock Crusher:

<u>Equipment</u>	<u>Powered</u>	<u>Process Rate</u> <u>(ton/hour)</u>	<u>Control Device</u>	<u>Date of</u> <u>Manufacture</u>
RC#1	diesel	124	Spray Nozzles	1974

Diesel Unit:

<u>Equipment</u>	<u>Maximum</u> <u>Capacity</u> <u>(MMBtu/hr)</u>	<u>Maximum</u> <u>Firing Rate</u> <u>(gal/hr)</u>	<u>Fuel Type,</u> <u>% sulfur</u>
Diesel #1	1.68	12.3	diesel fuel, 0.05%

C. Application Classification

The application for DSG is classified as non-major based on the diesel emissions, and the small, unquantifiable rock crusher emissions. The license is for a non-major source and has been processed as such.

II. BEST PRACTICAL TREATMENT

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Bureau of Air Quality regulations. BPT for new units consists of meeting Best Available Control Technology (BACT).

A. Rock Crusher

RC#1 was manufactured in 1974 with a rated capacity of 124 ton/hour. RC#1 is therefore not subject to EPA New Source Performance Standards (NSPS) Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after August 31, 1983, with capacities greater than 150 tons/hr for portable plants and greater than 25 tons/hr for non-portable plants.

The regulated pollutant from the rock crusher is particulate emissions. To meet BACT for control of particulate matter (PM) emissions from the rock crusher, DSG shall operate and maintain water sprays on the rock crusher. Visible emissions from the rock crusher shall be limited to no greater than 10% opacity on a 6 minute block average basis.

B. Diesel Unit

Diesel #1 is used to power RC#1.

A summary of the BACT analysis for Diesel #1 (1.68 MMBtu/hr) is the following:

1. The total fuel use for Diesel #1 shall not exceed 10,000 gal/year of diesel fuel, based on a 12 month rolling total, with a maximum sulfur content not to exceed 0.05% by weight.
2. Chapter 106 regulates fuel sulfur content, however in this case a BACT analysis for SO₂ determined a more stringent limit of 0.05% was appropriate and shall be used.
3. PM and PM₁₀ emission limits are based on data from similar diesel engines of this size and age.
4. NO_x, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
5. Visible emissions from Diesel #1 shall not exceed 20% opacity on a 6-minute block average, except for no more than 2 six-minute block averages in a continuous 3-hour period.

C. Stock Piles and Roadways

BACT for all potential sources of fugitive PM emissions, including material stockpiles and roadways, shall be controlled by wetting with water, with calcium

chloride, or other methods as approved by the Bureau of Air Quality to prevent visible emissions in excess of 10% opacity, on a 3 minute block average basis.

D. Facility Emissions and Fuel Use Caps

Total Allowable Annual Emission for the Facility
(used to calculate the annual license fee)

<u>Pollutant</u>	<u>Tons/Year</u>
PM	0.1
PM ₁₀	0.1
SO ₂	0.1
NO _x	3.0
CO	0.7
VOC	0.2

III. AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulation Chapter 115, the level of air quality analyses required for a minor new source shall be determined on a case-by-case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-833-71-A-N, subject to the following conditions:

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which

- any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions.
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115.
 - (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both.
 - (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request.
 - (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. § 353.
 - (6) The license does not convey any property rights of any sort, or any exclusive privilege.
 - (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions.
 - (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request.
 - (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license.

- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - (i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - a. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - b. pursuant to any other requirement of this license to perform stack testing.
 - (ii) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - (iii) submit a written report to the Department within thirty (30) days from date of test completion.
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
 - (i) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - (ii) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - (iii) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.
- (16) **Rock Crusher**
- DSG shall operate and maintain spray nozzles for particulate control RC#1. Visible emissions from the crusher shall be limited to no greater than 10% opacity on a 6 minute block average basis.
 - DSG shall maintain a log detailing the maintenance on the water spray nozzles. The maintenance log shall be kept on-site at the rock crushing location.
 - DSG shall maintain a log detailing and quantifying the hours of operation on a daily basis for RC#1. The operation log shall be kept on-site at the rock crushing location.
- (17) **Diesel #1**
- Total fuel use for Diesel #1 shall not exceed 10,000 gal/yr of diesel fuel with a maximum sulfur content not to exceed 0.05% by weight. Compliance shall be based on fuel receipts from the supplier showing the quantity of fuel delivered and the percent sulfur of the fuel. Records of annual fuel use shall be kept on a 12-month rolling total basis.
 - Emissions shall not exceed the following:

Equipment		PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Diesel #1	lb/hr	0.13	0.13	0.08	7.41	1.60	0.59

C. Visible emissions from Diesel #1 shall not exceed 20% opacity on a 6-minute block average, except for no more than 2 six-minute block averages in a continuous 3-hour period.

(18) **Stockpiles and Roadways**

Potential sources of fugitive PM emissions including material stockpiles and roadways shall be controlled by wetting with water, with calcium chloride, or other methods as approved by the Bureau of Air Quality to prevent visible emissions in excess of 10% opacity, on a 3 minute block average basis.

(19) **Equipment Relocation**

A. DSG shall notify the Bureau of Air Quality, by a written notification at least 10 days in advance, prior to relocation of any equipment carried on this license. The notification shall be sent to:

Attn: Relocation Notice
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

The notification shall include the address of the equipment's new location and the license number pertaining to the relocated equipment.

B. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification will be made to the respective county commissioners.

(20) DSG shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605-C).

(21) DSG shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order.

(22) DSG shall pay the annual air emission license fee within 30 days of October 31st of each year. Pursuant to 38 M.R.S.A. Section 353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under 38 M.R.S.A. Section 341-D, Subsection 3.

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(23) The term of this order shall be for five (5) years from the signature date below.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2002.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 7/2/02

Date of application acceptance: 7/08/02

Date filed with the Board of Environmental Protection: _____

This Order prepared by Lynn Ross, Bureau of Air Quality.